



PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known	
				Application Number	10/541,601-Conf. #8968
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Filing Date	July 7, 2005
				First Named Inventor	Takuma SAWAYA
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	0020-5397PUS1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
CE	AA	US-6,337,668-B1	01-08-2002	Ito et al.	
CE	AB	US-5,767,807-A	06-16-1998	Pritchett	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
CE	BA	EP-1 035 614-A2	09-13-2000			
CE	BB	JP-2002-111559-A	04-12-2002			ABS
CE	BC	JP-2002-374116-A	12-26-2002			ABS
CE	BD	JP-2002-261532-A	09-13-2002			ABS
CE	BE	JP-2002-330019-A	11-15-2002			ABS
CE	BF	EP-0 812 026-A2	12-10-1997			
CE	BG	JP-55-52603-A	04-17-1980			ABS

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CE	CA	Takashi ENOKI et al., 2000 Nen The Institute of Electronics, Information and Communication Engineers Sogo Taikai Koen Ronbunshu, March 7, 2000, page 75	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	<i>Shih-tno chen</i>	Date Considered	9/24/07
--------------------	----------------------	-----------------	---------

Birch, Stewart, Kolasch & Birch, LLP

CG/smt



PTO/SB/08A/B (09-06)

Approved for use through 03/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Application Number	10/541,601-Conf. #8968
		Filing Date	April 7, 2006
		First Named Inventor	Takuma SAWATANI
		Art Unit	N/A
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	0020-5397PUS1
Sheet	1	of	1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
ce	AA*	US-6,492,942	12-10-2002	Kezys et al.	
ce	AB*	US-2002/0132581-A1	09-19-2002	Ichihara	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
ce	BA	WO-01/35490-A1	05-17-2001			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(ii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
ce	CA	Cheng et. al., IEICE TRANS. COMMUN., Vol. E84-B, No.7, pp. 1790-1800 (July 2001)		
ce	CB	Shishkov et. al., "Adaptive Beamforming Of Espar Antenna Based On Stochastic Approximation Theory", (2001)		
ce	CC	Gyoda et. al., "Design of electronically steerable passive array radiator (ESPAR) antennas" Vol. 2, pp. 922-925 (2001)		
ce	CD	Anonymous: Research and development of a 3-element planar ESPAR antenna for Binary Reactance Diversity" pp. 1-2 INTERNET ARTICLE (2002)		

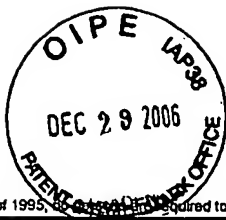
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	shih-thao chen	Date Considered	9/24/07
-----------------------	----------------	--------------------	---------

Birch, Stewart, Kolasch & Birch, LLP

CG/khm



PTO/SB/08A/B (09-06)

Approved for use through 03/31/2007. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO		Complete if Known	
		Application Number	10/541,601-Conf. #8968
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Filing Date	April 7, 2006
		First Named Inventor	Takuma SAWATANI
		Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
		Attorney Docket Number	0020-5397PUS1
Sheet	1	of	1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
ce	AA	US-6,337,668 B1	01-08-2002	Ito et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
ce	BA	KR2000-0062747	10-25-2000	Ito et al.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinda Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

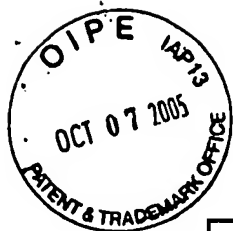
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	<i>Shih-Chen Chen</i>	Date Considered	9/24/07
-----------------------	-----------------------	--------------------	---------

Birch, Stewart, Kolasch & Birch, LLP

CG/jm



PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete If Known	
				Application Number	10/541,601
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Filing Date	July 7, 2005
				First Named Inventor	Takuma SAWATANI
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	0020-5397PUS1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
ce	AA*	US-6,677,898-B2	01-13-2004	Cheng et al.	
ce	AB*	US-6,407,719-B1	06-18-2002	Ohira et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY			
ce	BA	JP-2002118414-A	04-19-2004			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(ii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
ce	CA	Ohira et al., 2000 IEEE International Conf. on Phased Array System & Technology, pp. 101-104, Dana Point, CA., May 21-25, 2000.		
ce	CB	Ohira, Technical Report of the Institute of Electronics, Information and Communication Engineers in Japan, IEICE, AP2001-16, SAT2001-3, pp. 15-20, May 2001.		
ce	CC	Ayoma et al., Proceedings of General Conference of IEICE, B-5-224, p. 695, March 27-30, 2002 together with English translation thereof.		
ca	CD	Ohira et al., Technical Report of IEICE, AP2000-44, pp. 7-14, July 2000.		
ce	CE	Murase et al., IEEE Transactions on Vehicular Technology, Vol. 43, No. 3, pp. 537-541, August 1994.		
ce	CF	Arai, H., Sougou Denshi Shuppansha, 1st Ed., April 9, 1996, pp. 151-155 together with a partial English translation thereof.		
ce	CG	Rustako, Jr. et al., IEEE Transactions on Communications, Vol. COM-21, No. 11, pp. 1257-1268, November 1973.		
ca	CH	Afrashteh et al., Conference Record of Globecom '88 Hollywood, pp. 810-814, November 1988.		
ca	CI	Akaiwa, Y., Proceeding of 39th IEEE Vehicle Technology Conf., pp. 470-473, 1989.		
ce	CJ	Proakis, J.G., Digital Communications, 3rd Ed., pp. 274-277, McGraw-Hill, New York, 1995.		
ce	CK	Taromaru et al., Technical Report of IEICE, RCS2002-179, pp. 43-48, October 2002.		
ca	CL	Ohira et al., Technical Report of IEICE, AP2002-93, pp. 13-18, October 2002.		
ca	CM	Partial English translation of Enoki et al., Proceedings of General Conference of The Electronics, Information and Communications Engineers in Japan, March 2000.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	<i>Shih-thro Chen</i>	Date Considered	9/24/07
--------------------	-----------------------	-----------------	---------

Birch, Stewart, Kolasch & Birch, LLP

CG/hfj

JC14 Rec'd PCT/PTO 07 JUL 2005

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Complete if Known		
			Application Number	10/541601	
			Filing Date	July 7, 2005	
			First Named Inventor	Takuma SAWATANI	
			Art Unit	2821	
			Examiner Name	Not Yet Assigned shih-lee chen	
Sheet	1	of	1	Attorney Docket Number	0020-5397PUS1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
ce	AA	US-6,337,668-B1	01-08-2002	Ito et al.	
ce	AB	US-5,757,807-A	06-16-1998	Pritchett	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
ce	BA	EP-1 035 614-A2	09-13-2000			
ce	BB	JP-2002-111559-A	04-12-2002			ABS
ce	BC	JP-2002-374116-A	12-26-2002			ABS
ce	BD	JP-2002-261532-A	09-13-2002			ABS
ce	BE	JP-2002-330019-A	11-15-2002			ABS
ce	BF	EU-0 812 026-A2	12-10-1997			
ce	BG	JP-55-52603-A	04-17-1980			ABS

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
ce	CA	Takashi ENOKI et al., 2000 Nen The Institute of Electronics, Information and Communication Engineers Sogo Taikai Koen Ronbunshu, March 7, 2000, page 75	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	shih-lee chen	Date Considered	9/24/07
--------------------	---------------	-----------------	---------

Birch, Stewart, Kolasch & Birch, LLP

CG/smt